"As Soon as I Turned Off the Camera, We Jumped to Help": Nonverbal Communication of Croatian TV Journalists in Coverage of Sudden Crises Events

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Abstract: Media narratives, frames and the manner of sudden-onset crises events' coverage strongly influence the audience's perception and understanding of situation and their behavior. Nonverbal communication of broadcasters transfers important information related to viewers' formation of impressions. That is why the journalists strive to hide the nonverbal cues. During 2020, Croatia was hit, along with COVID 19 pandemics, with 2 devastating earthquakes. At the same time, formal education of journalists in Croatia does not include syllabi aimed to develop knowledge and skills for disaster journalism. This small explorative study aims to explore nonverbal cues of Croatian journalists during the live TV breaking news on COVID-19 breakthrough and earthquake in Zagreb, in comparison to their non-crisis reporting. A quantitative analysis using software ELAN was conducted on a deliberate sample of video clips. The obtained results show that nonverbal cues were moderately and expectedly frequent. Speech fluency was within the normal rate, with natural breathing pauses included and the use of fillers appropriated to the spontaneous speech. The analyzed nonverbal cues pattern does not differ depending on the reporting context which suggests that nonverbal communication skills need to be improved. Absolutely unbiased journalism may not be possible, but in order to achieve the neutrality standard, nonverbal communication competence should be incorporated both into curricula and into the journalist code of ethics.

Keywords: Broadcast journalism, Disaster reporting, Formal education, Neutrality, Nonverbal communication

Introduction

Nonverbal communication complements what has been said, and when using it we express our attitudes and feelings towards the topic we are talking/speaking about. Although nonverbal cues such as looks, grimaces, and various body parts movements are only a small part of communication in general, they complement the verbal aspect of communication. Nonverbal communication is extremely important in the media because journalists are

people whose task is to convey all objective information to people. An appropriate amount of relevant and truthful information makes it easier to understand the environment, thus eliminating uncertainty with the recipient. Although the media does not determine what people will think (Cohen, 1963), thematic frames and media narratives that publicly present a crisis situation greatly influence the formation of public opinion, as well as the opinion of official bodies (Hromadzic, 2014; Jansen, 2012; Vasterman et al. 2005). Consequently, the responsibility of communicators in mass media is great. Therefore, if, in addition to performing a quality informative task, a journalist is able to, with his entire communication, convince people affected by crisis situation, and by doing so he can also convince the rest of the public, that the situation is under control and that all actions and events take place according to contingency plans, while at the same time sending them a reassuring message, such a journalist is well acquainted with professional standards and is at the same time highly socially responsible (Perinic, 2010; Karlsson, 2010; Coleman and Wu, 2006). However, neutrality in crisis situations is not always possible precisely because news about crisis situations is always very emotionally charged, especially when it comes to human lives (Barovic, 2011).

Nonverbal Communication

Communication can be verbal and nonverbal. In verbal communication, we exchange messages with words, and it includes both speaking and listening. Nonverbal communication is an integral part of everyday communication and it includes various conscious and unconscious (Andersen, 1998) hand and foot movements, facial gestures, poses and similar; it greatly contributes to expressing emotions and affects how something is said. For example, it is almost innate for us to smile when talking about a happy event, and when giving instructions on direction it is almost certain that hands will follow our words, in other words we will show the person which direction to take. Verbal communication is largely accompanied by nonverbal communication which helps the interlocutor to accept the message in a certain way (Bogcev, 2018; Coleman & Wu, 2006). According to Mehrabian Communication Model 7-38-55 (Mehrabian, 1972), which was based on research into the importance of verbal and nonverbal messages in human communication, in the overall impact of one message, seven percent belongs to the speech part, i.e. words, thirty-eight percent to the voice part, i.e. a tone of voice, modulation and other sounds, and as much as fifty-five percent to that which is unsaid. Nonverbal behaviour is important for creating impressions on the interlocutor. Positive expressions are associated with judgments of greater credibility and it has been proved they show the speaker's reliability or persuasiveness, his integrity and good character, while negative expressions show the opposite (Coleman & Wu, 2006). By studying eye, eyebrow, and mouth movements, we can learn more about what the speaker actually thinks and feels on certain topics (Etuaho, 2012).

Paralinguistic and Extralinguistic Cues

Nonverbal communication is divided into paralinguistic, which refers to voice, and extralinguistic (i.e., non-linguistic) involving body movements (Skaric, 1988; Farnvald, 2011). Paralinguistic means are rhythm, intonation, volume, colour and voice speed as well as pauses, noises when speaking, crying, laughing and

shouting (Vuletic, 2007; Skaric, 1988). Timbre creates an impression of a person - for example, the level of education, intelligence, occupation or social characteristics of that person. Likewise, it highlights the person's current emotional state - a moderate or calm voice usually shows how calm, harmonious, sensitive and similar to that the person is. Nasal voice is a sign of rejection, but also of sensations such as touch, taste and smell. On the other hand, trembling / voice trembling is related to excitement, insecurity or fear (Vukic, 2015: 8). Volume depends on a person's situation, but it also shows his personality. Quiet speaking is associated with intimacy (for example friendship), calmness, lack of self-confidence, sadness or even fear, while a stronger voice is associated with aggression, anger, superiority, and the similar. Speech rate or tempo is measured by counting spoken syllables per second. A slow tempo means sadness, displeasure, or boredom, while a fast tempo means speaker's surprise, excitement, or joy. It is important to note that tempo also includes pauses - the pause happens on its own, i.e. it is not accompanied by other paralinguistic means, while the rhythm and volume happen at the same time. Pause is defined as the absence of verbal speech; however, it plays a major role in speech. Pauses can be an indication of correcting a mistake in a sentence, they can stand where the speaker carefully chooses the words to be spoken. A pause can be a punctuation (equal to a point in a sentence) or a respiration (taking a breath during speech) and can be an indication of whether a speech is spontaneous or learned. (Vukic, 2015: 9; Skaric, 1998).

Extralinguistic cues is the name for parts of nonverbal communication that are present during speech, but are not the speech itself. There are adapters, emblems, illustrators and regulators (Skaric, 2008: 18). According to Vukic (2015), adapters include movements, that is acts that warn the interlocutor/audience of the speaker intention to begin/continue his speech, and these cues have so far taken on certain meanings. Emblems include, for example, coughing before starting a speech as a sign for the beginning of the speaker's speech to which the audience must pay attention. Emblems are considered to be learned nonverbal cues that are not globally universal, i.e. such cues can differ from culture to culture. Such nonverbal cues include, for example, certain head movements that are typical of a culture or part of the population on a continent or in a country. Illustrators are type of nonverbal cues that refer to a wide group of pictorial nonverbal cues. Illustrators include gesture pictographs (drawing by hand in the air), ideographs (gestural analysis of concepts), spatial illustrators (showing the size or arrangement of things), cinematographers (action described by gesture and movement) and conductors (gestural support of speech, e.g. tempo). Likewise, onomatopoeic sounds are considered to be illustrators. Regulators are nonverbal cues that serve to hold back or interrupt communication, often to hold the attention of the viewer/interlocutor/audience. Regulators include long pauses, i.e. complete interruption of speech for a certain period in which the speaker, for example, carefully observes the interlocutors, and then the speaker continues the speech by emphasizing an important fact (Vukic, 2015: 10).

Nonverbal cues are also divided into kinesic cues, gestures and facial expressions, communication by sight or touch, proxemics, chronemics and territorial behaviour. However, these signs are divided into two larger groups - kinesic and proxemic cues (Vukic, 2015: 10). Kinesic cues include all body movements as a whole or parts of the body, i.e. facial expressions and gestures, while proxemic cues indicate the spatial behaviour of an individual, i.e. they refer to conveying a message about yourself and your attitude to an interlocutor or audience.

Therefore, spatial behaviour includes the position of an individual's body, physical distance from the interlocutor or the audience and territorial behaviour (Vukic, 2015: 10). Gestures are considered to be all forms of movement most often performed using hands or fingers. Those also include movements of other body parts such as legs and head. Although all conscious and unconscious body part movements are considered to be gestures, they do not include unintentional movements that cannot be influenced by the speaker (such as tics). Gestures are not universal or globally equal, so they differ depending on the culture (Vukic, 2015: 11). Facial expression, that is, facial mimics, is an indispensable part of nonverbal communication and therefore, of communication in general. Since it is a person's face that distinguishes it from others, it is considered to be one of the most expressive parts of the body. Mimics includes movements of facial muscles and movements of eyes, eyelids, eyebrows, chin, forehead and nose. Mimics often occurs and can encode independently in relation to verbal expression. For example, moving the eyebrows upwards is a sign of an affirmative response that does not always have to be accompanied by a vocal response (Vukic, 2015: 12).

Professional and Communication Competences of Journalists

Journalism is an occupation in which collected and processed information of interest, to at least some part of the public, is presented to the audience in form of meaningful news through available media - newspapers, television, radio, Internet portals and similar. A journalist should have formal education, be eloquent, have a pleasant voice, broad knowledge of various fields, be calm, have developed social and communication skills. In the process of mediating information to the audience, the accuracy, credibility and truthfulness of the information that need to be conveyed, in a way that will be interesting, relevant and timely to the audience, is extremely important. Above all, information should be conveyed primarily in a neutral way, so that the audience could get an objective picture of the event/news, and so that they could make their own position/judgment in certain situations and determine their behaviour accordingly.

Journalistic Ethics

In his work, a journalist must respect the fundamental human rights of a person, his privacy and dignity, especially in reporting on crisis situations, traffic accidents and all those situations where the dictate of commercialism, sensationalism or emotion might override the rules of journalistic ethics. (Deavours, 2020, Pisonic, Babić, 2017; Perinic, 2010). Journalistic ethics is an extremely important component of journalism. The basic setting of a journalist should be the protection of an individual and his rights. Great attention should be paid to the type of content published in the media, not only to protect the identity and dignity of victims but also to prevent security or other threats to other people, i.e. traumatizing vulnerable people with violent content. In Croatia, in addition to legal regulations, journalists are obliged to adhere to the rules of *Honour Codex of Croatian Journalists.* Although some media in crisis situations are guided by the "public interest" in publishing content from the "crime pages", the journalist's job as a public worker includes social responsibility in preserving the welfare of individuals but also in maintaining public order and peace, so as not to cause panic or contribute to increased state of fear and concern of the public.

Media Reporting in Crisis and Sudden Crisis Situations

Crisis is a perception or experiencing of an event or situation as an intolerable difficulty that exceeds the person's current resources and coping mechanisms. (James & Gilliland 2001:26.27). Crisis communication is a form of communication whose main task is to prepare or guide individuals affected by a crisis so that the crisis would have a positive outcome with as few negative consequences as possible (Holy & Borcic, 2018; Plenkovic, 2015). Sudden crises are crises that happen unexpectedly and quickly - sudden crises include traffic accidents, earthquakes, deaths, dam bursts, sudden floods, public health crises, terrorist attacks and more. Sudden crises are often predictable (if a natural or environmental disaster occurs, for example), but the public is not informed in time to take the necessary precautions for evacuation, for example. They occur very abruptly and cause a large number of victims precisely because people are not ready to evacuate in such a short period of time, or at least take refuge in a safe place from the one affected by a crisis (Wei et al, 2010; Tomic & Milas, 2006).

The main task of the media is to convey the message to the target audience, so the media is one of the main links in successful crisis communication management. The outcome of a crisis situation can be positive or negative in relation to public. A positive outcome is when public remembers a crisis situation only as one of life experiences; on the other side, a negative outcome is when public remembers a crisis situation as a great tragedy which affected them or people close to them, or even the whole world. The example of Katrina Hurricane from 2005 represents a negative outcome of that particular crisis situation, even though the event was expected and announced given the natural disasters that preceded in that area. The damage was huge, and the hurricane left behind 1,833 victims. Crisis communication completely failed. Cole & Fellows (2008: 213) believes that in order for a crisis situation to have a positive outcome, crisis communication through the media and official gazettes should first warn people of a possible impending crisis, and then offer the audience courses or free preparation classes for proper action in such situations.

The media is the main information source that citizens should trust in any crisis situation. They present basic information without leaving room for speculation or rumours. At the same time, they bring the first information about the situation and instructions on how individuals should behave in a particular crisis situation. Karlsson (2010) states that mainstream media continue to play a key role in crisis communication because they continue to dominate as the main sources of credible information. In the context of crisis communication, participatory journalism results in news media losing some control over what is published as news, and it also loses control over the context in which the news is presented, as it allows its users to comment and report uncritically and unethically on crisis events. This should be taken into consideration when attempting to determine the characteristics of overall media reporting (Plance, 2012). However, media portrayals of disasters may influence public understanding and acting in accordance to a crisis situation (Sorribes & Cortiñas Rovira, 2011). Accurate media coverage can reduce or limit confusion, fatalism or public panic (Van der Meer & Verhoeven, 2013). Overall broadcaster's communication is able to convince people that the situation is under control, all the measures are taken as planned. Journalists can send a reassuring message to the media audience (Gao, 2018; van der Meer et al., 2017). Otherwise, the media contribute to the negative crisis outcome and exploit the crisis

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scenario: they seek sensation; they deny access to rescue services, affect the secondary victimization of victims, or even create new syndromes, such as the so-called World Trade Centre syndrome (Cao et al. 2020; Tierney, Bevc, & Kuligowski, 2006; Vasterman et al, 2005).

TV Broadcasting

Television should be a combination of all codes and laws related to the media. Television is the medium in which the visual part of the news is the predominant one. Therefore, in television journalism, image is more important than sound. That is why the (TV) journalists strive to hide the nonverbal cues. When creating content for television, it is important to keep in mind that individuals do not react equally and that audiences perceive the same news in different ways. Miller & Lehsner (2007: 28) considers that "one of the reasons why news could influence how people cognitively process television news is the desire to acquire knowledge about current events. The second reason is explained evolutionarily, when attending new and potentially threatening events in the environment was considered a matter of survival."

Live broadcasting is extremely important, especially in crisis situations. Audiences will believe more the news transmitted directly from the scene, and so television (as a medium and as a separate unit) will achieve greater viewership, popularity and access to information than official bodies (such as police, firefighters and crisis headquarters). Various studies have also shown that in a crisis, TV is becoming the dominant medium. „Apparently, individuals who used radio, print media and the web during normal times relied on TV to a greater degree in the months following the crisis, and the leading force in this change was the perception of threat. It is clear that TV is the medium of choice in a national crisis, and this preference is not simply the result of habit" (Wilson, 2004: 354; Althaus, 2002). Gao (2019) encourages television companies: … "broadcast, let the audience feel the most direct timeliness, integration and reality. Even after the shortest editing of the news, the audience will inevitably question their authenticity, due to the commercial characteristics of TV media. (Gao, 2019: 928). In addition, it has been proven that people find it easier to deal with the truth and clear factuality of the actual event ... even in 9/11-related events. It is lack of clarity and confusion not accuracy that makes persons uneasy (Scanlon & Hunsberger, 2011).

Education of Journalists in Croatia

For the purposes of this paper, curricula on a total of 5 Croatian universities/polytechnics that offer journalism studies were analysed. A search of valid study curricula and individual courses' curricula found only one subject related to crisis situations within the program of the Faculty of Political Science, University of Zagreb. However, as this course does not state learning outcomes, it cannot be determined with certainty that it includes teaching units regarding the acquisition of communication skills for reporting in sudden crisis situations. Therefore, generations of Croatian journalists and other media experts could not develop within their formal education communication skills focused on controlling nonverbal communication. Given the recent devastating earthquakes that hit Croatia as well as the uncertainty regarding the consequences of the duration and further

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course of the SARS-CoV-2 pandemic and the impact that the so-called new normal reality has on our lives, there is a clear need to introduce appropriate higher education teaching content. The purpose of that would be to strengthen the communication and professional competences of future journalists for quality media work within *disaster journalism*. In a broader sense, journalists' higher education in Croatia needs to embrace features of instructional design which may serve as a transdisciplinary theoretical framework for the establishment of a new supplementary education programme for journalists in order to strengthen their professional and communication competences (Bagaric, 2021).

Method

Aims and Objectives

In the mentioned theoretical framework, this paper wants to investigate some nonverbal features of Croatian journalists in the initial live television reporting on sudden crisis situations, in 2 points of measurement (1. COVID-19 pandemic and 2. earthquake in Zagreb on March 22, 2020), where some functionalities of ELAN analytical software will be used. The general goal of the paper is to establish the features of recorded paralinguistic means and nonverbal cues in the initial media television reporting on crisis situations, in relation to the nonverbal features of everyday media reporting. Using specific goals, we would like to investigate whether some features of nonverbal communication affect the achievement of basic media reporting goals in (sudden) crisis situations and the journalists' communication competences. Based on the set purpose and goals, the following research questions were defined:

RQ1. What are the most common extralinguistic cues in the observed examples?

RQ2. What are the metric features of pause (silent pauses, breathing and filler shaped pauses) in speech in selected examples?

RQ3. Can we assess the communication competences of journalists in relation to the situational context, stress level and task preparation?

Sampling

AV sample

We used as analysis units, for research conducted in this paper, a deliberate sample of 12 video clips in total from reporting on sudden crisis situations in Croatia. The sample consists of live coverage broadcast by three Croatian national television stations - Croatian Radio and Television (HRT), RTL and NovaTV. A sample of video clips related to *Case 1* and *Case 2* was collected from the official website of the public Croatian Radio and Television (https://www.hrt.hr/hrt/o-hrt-u/) (HRT), which has a branched infrastructure network: three national radio stations, 8 regional radio stations and 8 regional centres, and four terrestrial television programs that can also be watched via the Eutelsat 16A satellite. According to the research of the Agency for Electronic

Media (AEM) for 2020, HRT holds the second place in the ranking of the most viewed Croatian television channels. AV content samples related to Case 3 and Case 4 were collected from the official NovaTV social network pages (https://novatv.dnevnik.hr/). NovaTV is the first commercial television with national concession that started broadcasting in 2000. According to AEM data, NovaTV was in 2020 on the first place according to television program viewership. RTL is the second commercial television that got a concession in Croatia (https://www.rtl.hr/). It started broadcasting in 2004, and most of the content broadcasted on RTL is of entertainment-educational character. According to AEM data for 2020, RTL ranks third in terms of viewership ratings. Cases 5 and 6 were collected from the official RTL network website.

Journalists' Sample

In the journalists' sample of those who report in the first measurement point- the first confirmed case of COVID-19 on 25 February 2020 in Croatia is reported by the following journalists: RI (HRT), DG (NovaTV) and MD (RTL). In the journalists' sample of those who report in the second measurement point - after the earthquake, the journalists who reported were AJ (NovaTV), PV (HRT) and IR (RTL). In the HRT sample, in Case 1 and in the first measurement point, RI, an experienced journalist dealing with health issues, most often appeared live. For the second measurement point (Case 2), the reporting of PV, a long-time presenter and author of several show cycles, who sometimes reports live, was analysed. In NovaTV sample, in the first live measurement point, in Case 3, DG reports, a television journalist for NovaTV news program. The second measurement point covers Case 4 and the reporting of AJ, a long-time journalist known for live reporting. MD is an experienced RTL journalist who reports live in the first measurement point in Case 5. IR is an RTL journalist, who mostly reports live, and covers the second measurement point in the RTL journalists' sample (Case 6).

Methods of Data Collection and Processing

During analysis unit sampling, AV clips were taken from the available informative content of live reporting broadcast by the three most viewed Croatian television stations (NovaTV, HRT and RTL). Given the sudden crisis situations, two measurement points were defined: the first confirmed case of COVID-19 in Croatia on 25 February 2020. (first measurement point) and the devastating earthquake that occurred in Zagreb on March 22, 2020 (second measurement point). 22 March 2020 In the selection of AV material, in addition to the defined measurement points, the main criterion was the availability of AV material. Audio-visual materials were downloaded from the official pages (social networks) of certain television companies. Analysis units were cut into 30 second segments. Following that, sampling of video clips from reporting in non-crisis situations was dome, which consists of video clips from shows on daily, or "more casual" topics, or from studio reports that the journalists prepared in advance for. A control AV sample of daily news was obtained, which collected reference metrics that were used to compare journalists reporting in relation to the reporting context. The basic settings for the analysis of individual nonverbal elements were determined based on a study of available literature. For the

purposes of this paper, hand movements and eyebrow raising (extralinguistic cues) as well as metric properties of speech (speed and fluidity), and pauses as paralinguistic elements, were studied.

Eyebrow movements proved to be a very important part of nonverbal signalling in broadcasting news, so they were used not only for rhythm, but also to emphasize syllables, words, or even longer speech pronunciations. Fillers refer to pauses in which an empty space is filled between words when the speaker thinks about the next word (in such pauses the phrases "um" and "uh" are used); a pause for breathing is one during which the speaker takes a breath or exhales; a silent pause refers to a pause that marks the end of a sentence (serves as a period); while a wrong beginning refers to a pause that occurs after the speaker has used the wrong word and is followed by a correction of the incorrect word. A hand movement is considered to be any movement of one hand from the other hand, or that of a microphone held by a journalist during reporting. The hand movements were analysed, the so-called *conductors* which emphasize certain parts of sentences, and by doing so the speech looks more convincing and natural.

Data processing was performed using the ELAN audio and video annotation tool. ELAN (EUDICO Linguistic Annotator) is a computer software produced by *Max Planck Institute for Psycholinguistics (The Language Archive)* in the Netherlands. The software has several purposes, one of which is conversational analysis of video and audio recordings. This software was chosen because it is user-friendly, contains a variety of useful options, it is adaptable to our needs, and it is free. Additionally, the decision to use this program was a result of numerous positive user reviews, as well as free instructions for using the program.
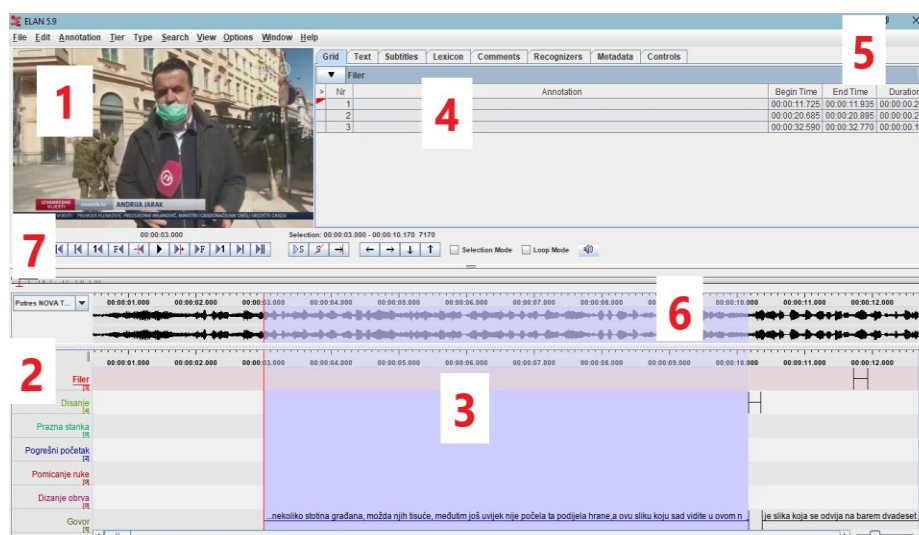

Figure 1. The initial interface of ELAN- Linguistic Annotator computer program

Source: Adapted according to Aljukic, B. (2015). Language and gender differences in media discourse: a conversational analysis of television interviews. Dissertation. Osijek: Faculty of Humanities and Social Sciences, Josip Juraj Strossmayer University of Osijek
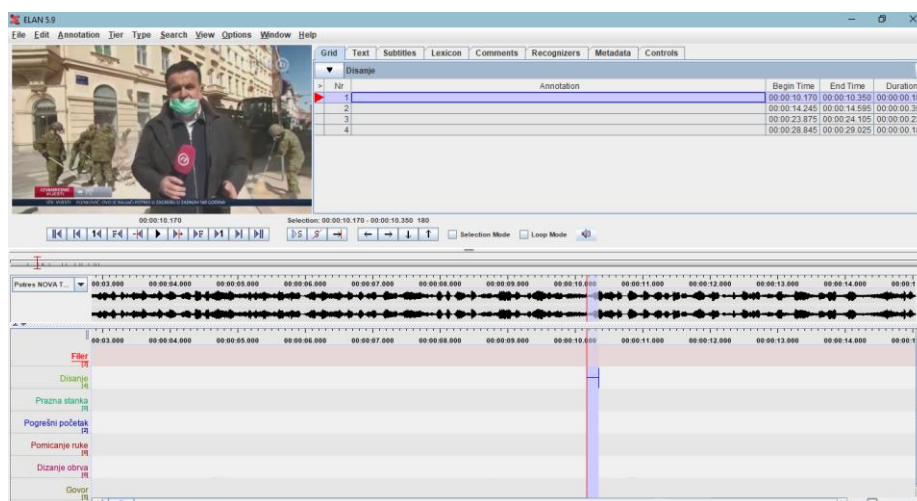
Figure 1: Example of ELAN segmentation

Source: Authors

The basic functionalities of ELAN tool include segmentation, annotation and transcription. In the data processing, the segmentation was first performed on a sample of AV clips (Figure 2). Segmentation is a name for determining the duration (segment; share) of a feature in the audio-visual recording analysis that is enabled on a slider displaying the shape of a sound wave. The annotation in ELAN software refers to associating the name (in this case) of nonverbal features with the time period in which that feature occurred. When analysing audio-visual content in ELAN, the features that will be specifically observed and recorded during the entire analysis are determined. An annotation of the kinetic elements was performed (Figure 3) and the pause (Figure 4), and then the transcription of an individual journalist's speech was done.
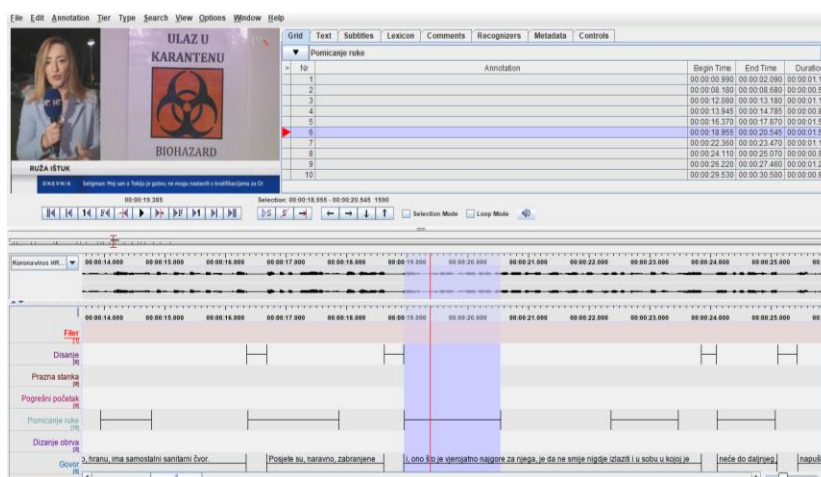

Figure 3. Example of an annotation "Hand movement" - First measurement point (RI)
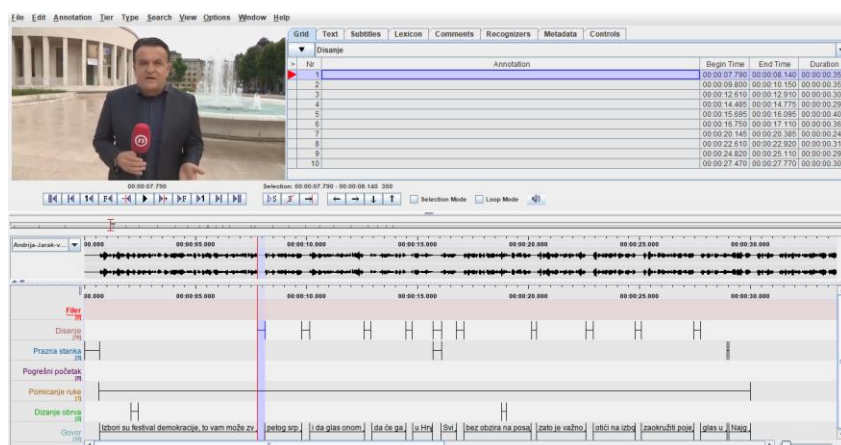
Figure 4: Example of one of the annotations "Breathing" - Second measurement point (AJ)

Transcription of audio-visual content refers to the written presentation of spoken text by the observed speaker in the analysed video. In other words, content transcription means writing the text that the speaker utters.
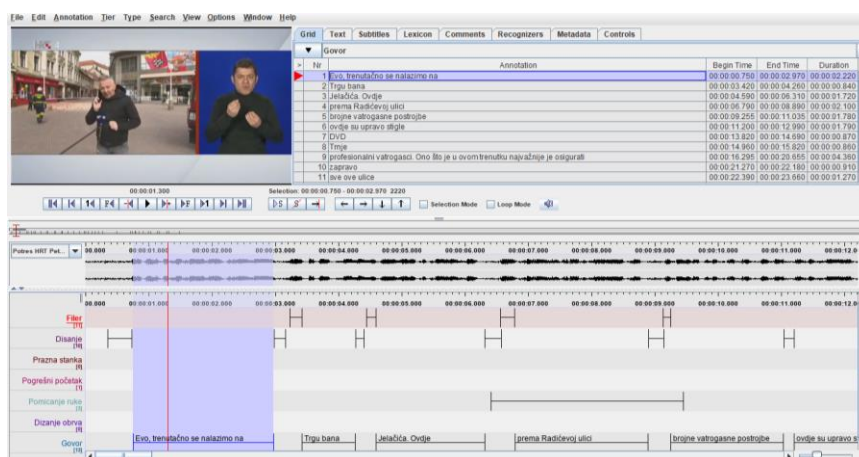

Figure 5: Example of speech transcription in reporting - First measurement point. (PV)

After the speech transcription, we analysed the nonverbal cues used by the journalists while reporting. Given the very large amount of analytical material obtained, individual functionalities will not be further illustrated with appropriate tabular representations of the obtained metric values. All interested readers can be provided with a detailed insight into the working material by e-mailing the corresponding author.

Conversational Analysis as Uncritical Method

Conversational analysis is a speech analysis that includes elements of both verbal and nonverbal communication elements. CA enables the analysis of all aspects of speech, whether it concerns one or more people. The goal of conversational analysis is to study the ways in which participants in a speech or conversation react (verbally and nonverbally) to each other and how they establish mutual communication (Aljukic, 2018). Conversational analysis is actually the analysis of language while it is being used. It is important to note that conversational

analysis is used in everyday use, with the aim of determining some of the speech features. Among these features the structure of speech, orderliness, fluidity and similar can be included, for example. Critical conversational analysis refers to the analysis of verbal and nonverbal speech in conjunction with other humanities and social sciences. For example, critical conversational analysis provides the context, totality of social, historical, cultural facts, and relationships behind the frequency of the speaker's use of certain gestures given the cultural background the speaker has. On the other hand, uncritical conversational analysis refers to a simpler form of communication analysis in which speech itself is analysed without explaining why a gesture occurs more frequently in one speaker than in another (Billig, 1999). Therefore, the AV content samples used in this paper were analysed regardless of the context, or the background cultural facts in which the material was created. In order for a conversational analysis to be complete, a person analysing a speech or a conversation must focus on all movements as well as the speaker (together with his interlocutors) and on all linguistic and paralinguistic speech or conversation features (Aljukic, 2015). Likewise, an attempt was made to determine the difference by comparing the characteristics of journalists' non-verbal communication in relation to the reporting context.

Ethical Notes and Methodological Limitations

Since this is a publicly available digital material, it was not necessary to ask for the respondents' consent for the purposes of this research. We would like to emphasize that the AV content sample was not selected in order to damage the reputation of journalists or the media, and each annotation, segmentation and transcription corresponds to the individual analysed segments. Methodological limitations in the research conducted in this paper primarily relate to the successful application and adaptation of the computer program ELAN's functionality to working environment needs. For example, the ELAN software does not have the ability to measure volume. Therefore, it was impossible to study the speaking volume in selected cases. On the other hand, ELAN software offers various other possibilities such as measuring time (as well as recording time periods) in milliseconds, which is very important for the objectives of this paper. Furthermore, the restriction applies to intentional and relatively small video/audio recording sample. Greater difficulties in the sampling process were caused by the fact that not all target recordings were publicly available; those that were did not all meet the quality criteria for conducting the analysis. It should also be noted that the student was not allowed to use specific AV segments (that lasts less than one minute) free of charge. Likewise, some journalists did not respond to either the student's or the mentor's request for cooperation regarding the acquisition of reference material. In addition, it was not possible to include a number of local broadcasters in the analysis - which might result in different findings - because they do not store or publish published videos of specific reporting at sudden crisis measurement points that were analysed in this study.

Results

Case 1. RI (HRT) journalist - Both Points of Measurement

Table 1. Nonverbal features, frequency and average duration - First measurement point (RI)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	1	120
Breathing	6	258.3
Silent pause	0	-
Wrong beginning	0	-
Hand movement	10	1091
Raising eyebrows	2	485

A software analysis in ELAN (Table 1) on HRT news program video clip lasting a total of 30 seconds showed that the journalist RI used a pause in form of a filler only once for 120 ms, while breathing shaped pauses occurred a total of six times. Pauses in form of a wrong beginning as well as silent pauses did not occur, which indicates that the journalist was prepared for the speech and briefed on content of the text to be spoken in front of the camera. As to nonverbal cues, the journalist raised her eyebrows twice (lasting 500 and 470 ms), and moved her hand ten times, most often in the speech rhythm during the enumeration.

Speech rhythm is calculated by counting syllables per second. RI's verbatim text of the 30 second video clip that was analysed is the following: *"A younger man, as confirmed to us here in the hospital, is in good general condition, has some respiratory problems, but the doctors hope that he will stay well. He was placed in isolation, he receives medication there, he has, of course, food, he has independent sanitary facilities. Visits are, of course, forbidden and what is probably the worst thing for him is that he is not allowed to go out anywhere and he cannot leave the room he is staying in until further notice. What was also confirmed to me a little while ago here in the hospital is that it is still ... "*The number of syllables in the spoken text lasting 30 seconds amounted to 182, which means that the speech rate in this case is 6.1 syllables per second.

Table 2. Nonverbal features, frequency and average duration - Second measurement point (RI)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	3	166,67
Breathing	6	273,33
Silent pause	0	-
Wrong beginning	0	-
Hand movement	6	3815
Raising eyebrows	2	1010

An analysis in ELAN (Table 2) found that breathing pauses were used six times in this case, which corresponds to the previous case. The journalist used filler shaped pauses only three times. There was no wrong sentence

beginning, nor was there a silent pause. Regarding nonverbal cues, eyebrow raising is used twice for an average duration of 1010 ms. On the other hand, the hand movement occurred as many as six times and lasted for a longer time. The journalist is calmer in this case, speaks more slowly compared to the previous case and uses more breathing pauses. The verbatim text that RI says in this case is the following *"As you can see, the girls are behind my back, in just two months after the surgery they have doubled their weight and are making great progress. What I have to point out of course is their parents are not here at the moment as they have two other little children, but the girls are in safe and caring hands of the medical staff here at the KBC neonatology. I must definitely mention that the girls are facing another procedure in which doctors have to close their abdominal walls and how they ... "* The number of syllables in spoken text is 172, which amounts to 5.7 syllables per second. Therefore, the speech in this case is slower compared to the reporting case by the same journalist in a crisis situation.

Case 2. Journalist PV (HRT) - Both Measurement Points

Table 3. Nonverbal features, frequency and average duration – First measurement point (PV)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	11	274.55
Breathing	10	289
Silent pause	0	-
Wrong beginning	1	730
Hand movement	3	2400
Raising eyebrows	0	-

The software analysis (Table 3) established that the journalist PV took a breathing pause ten times in total during the reporting from Ban Jelačić Square on earthquake that had just occurred. Vlahov used filler pauses as many as eleven times, most often the particle "uh". There is no silent pause in this video clip, but the journalist uses a pause after saying a wrong word in duration of 730 ms. From nonverbal cues, the journalist uses the hand movement three times in the rhythm of speech, i.e. he uses it for explanation. The journalist does not raise his eyebrows during the speech.

The verbatim text that PV says during the reporting is the following *"We are here at Ban Jelačić Square, here towards Radićeva Street many fire brigades have just arrived, DVD Trnje, professional firefighters, what is most important at this moment is to secure, in fact, all these streets, which are - on which a lot of material from buildings has already collapsed, but ... "* It can be concluded from the meaning of the sentence spoken by the journalist that the speech was not prepared in advance but that it took place spontaneously during the recording. The number of syllables in the text is 131, i.e. the speech rhythm is 4.36 syllables per second.

Table 4. Nonverbal features, frequency and average duration– Second measurement point (PV)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	2	310
Breathing	5	332
Silent pause	1	740
Wrong beginning	1	120
Hand movement	0	-
Raising eyebrows	0	-

In the video clip analysis (Table 4), journalist PV uses a breathing pause five times in total, while the fillers are used only twice and, in both cases, they are used immediately after the breathing pause. The journalist uses once a pause to correct a speech error that lasts 0.12 ms, while sentences are joined instead of using silent pauses. Interestingly, hand movement during speech and raising eyebrows are not used at all during speech, and the reason for this is the fact that the journalist holds papers with notes and has no need to emphasize words or parts of sentences with his hands.

Verbatim speech is as following *"Economic growth and the fight against poverty in Croatia depend on establishment of an independent judiciary, the protection of property rights and the rule of law. We are talking about what has been done in the protection of property rights with N. S., co-founder of the International Leaders Summit- who is waiting for us on Skype in Jerusalem, Israel ... Mrs. S., good afternoon. Croatia ranks one hundred and twenty out of one hundred and forty countries in terms of judicial independence. How do you comment on that? "* The spoken text consists of 166 syllables in total, which means that the speech rate is 5.53 syllables per second. The text spoken by PV in calm studio recording is slower, the sentences are meaningful and each of them forms a unit. The journalist is calm, there are more breathing pauses.

Case 3. Journalist DG (NovaTV) - Both Measuring Points

Table 5. Nonverbal features, frequency and average duration – First measurement point (DG)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	9	164.44
Breathing	8	226.25
Silent pause	0	-
Wrong beginning	0	-
Hand movement	2	12800
Raising eyebrows	0	-

A software analysis (Table 5) found that the journalist DG used a breathing pause as many as eight times in a 30-second video clip, and that pause was followed by a filler pause nine times. The journalist never used a pause to mark the end of a sentence, neither a still pause after a misspelled text. Of all the nonverbal cues, the journalist does not use eyebrow raising, but he does move his hand in the rhythm of the speech during almost the entire 30 second speech. V

erbatim text - DG: *"... of healthcare Beroš here today at a Government conference, but in practical terms it does not mean much given the information we heard, which was presented yesterday, at least when it comes to borders there will be intensified surveillance actually of all who come to Croatia, and who stayed or came from the area where the virus was detected, especially from Northern Italy, here was the first man from the state inspectorate who said that he had already sent additional teams of sanitary inspectors to the borders ... "*The number of spoken syllables in this text amounts to 179. Therefore, the speech rate in this example is 5.97 syllables per second.

Table 6. Nonverbal features, frequency and average duration– Second measurement point (DG)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	0	-
Breathing	5	360
Silent pause	1	410
Wrong beginning	0	-
Hand movement	7	3708.6
Raising eyebrows	0	-

A software analysis (Table 6) found that the journalist DG used a breathing pause five times in total during this video clip. Also, the breathing pause serves twice as a pause for speech interruption (silent pause) which marks the end of the sentence. The journalist uses rhythmic hand movements to emphasize words or parts of sentences during almost the entire length of the video clip. In this example, there is no pause at the wrong beginning of the sentence, nor is there any eyebrow raising. The verbatim of the text spoken by DG in this case goes as follows: *"Party members, as independent candidates, can go to the polls if they collect five hundred signatures. About one hundred and sixty-eight political parties, as many as are registered in Croatia, can run in the election. Lists must be submitted by midnight on June 16. When the fourteen-day process is complete, the state election commission has two days to check all lists. With the submission of the list for St. Mark's Square, everyone who wants to run must have a special account through which they will finance the campaign ... "*This text consists of 163 syllables - the speech rate is 5.43 syllables per second, which is slower than live reporting from the first measurement point.

Case 4. Journalist AJ (NovaTV) - Both Measuring Points

Table 7. Nonverbal features, frequency and average duration – First measurement point (AJ)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	3	200
Breathing	4	235
Silent pause	0	-
Wrong beginning	2	235
Hand movement	0	-
Raising eyebrows	0	-

The analysis (Table 7) established that the journalist AJ took a breathing pause only four times while reporting live from the scene of the earthquake in Zagreb on March 22, 2020. Two out of four breathing pauses were accompanied by a filler. Regarding other types of pauses, the journalist uses the pause twice due to a wrong beginning lasting an average of 0.32 ms. The journalist does not raise his eyebrows to emphasize the words in the sentence, nor does he use nonverbal cues such as moving his hands since he is holding an object in his hands that prevents him from doing so.

The verbatim of the text that the journalist speaks is as follows: *"... several hundred citizens, maybe thousands of them, however the distribution of food has not started yet, and this picture that you see now in our report is an image that is taking place at twenty points in Zagreb at least at this moment. The Croatian army this intersection of Teslina and Gajeva streets here, that is a huge piece of the facade, but also the supporting wall, that is parts of the roofs have caved here. And now they are trying to do it - clean it, trying to move it so that the roads could be washed later, unfortunately there are several buildings - evacuated during ... ",* and it contains a total of 145 syllables. The speech rate in this video clip is 4.83 syllables per second.

Table 8. Nonverbal features, frequency and average duration– Second measurement point (AJ)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	0	-
Breathing	10	319
Silent pause	3	390
Wrong beginning	0	-
Hand movement	1	29360
Raising eyebrows	2	265

The analysis (Table 8) found that the journalist AJ moved his hand continuously for 30 seconds in a calmer

television report on elections in order to emphasize sentences or facts. He did not use fillers during his speech, and he used a silent pause three times in total at the end of sentences. He used his breathing pause ten times. He also once raised his eyebrows to emphasize and convince the public of the need to go to the polls. The wrong beginning of the sentence did not happen.

Verbatim of AJ's speech: *"Elections are a festival of democracy, it may sound like a cliché to you, but it is true and that is why it is very important that every citizen of this beautiful country goes to the polls on July 5 and votes for whomever he thinks would best represent him at the Croatian Parliament. We are all, regardless of the work we do, a part of this country's identity, so it is important to perform your civic duty, go to the polls, circle the list, circle the name of an individual for who you want to have the voice in the Croatian Parliament. The worst option is ... "* The speech contains 167 syllables, so the rhythm of AJ's speech in this case is 5.67 syllables per second.

Case 5. MD (RTL) Journalist - Both Points of Measurement

Table 9. Nonverbal features, frequency and average duration- First measurement point (MD)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	1	150
Breathing	4	242.5
Silent pause	1	80
Wrong beginning	0	-
Hand movement	2	1350
Raising eyebrows	0	-

Video clip analysis (Table 9) found that the journalist MD used a breathing pause four times in reporting, while she used fillers only once. She also used a complete pause only once, as the end of a sentence. She moved her hands only once for the purpose of emphasizing (she brought her hand closer to her body), and the raising of her eyebrows did not occur within the 30 seconds observed in the video clip.

Verbatim of the text that the journalist spoke in those 30 seconds observed is ... *hospital "Fran Mihaljevic", there are five people in isolation, depending on the development of the situation, they will be quarantined or released home - according to the latest information, the infected young man is feeling well, he is getting all the necessary medical care - once again here in the hospital, but from Crisis centre they are calming the public, they say that there is no reason to panic, and as we unofficially find out, in the largest Croatian hospital, KBC ... ".* The spoken text contains 139 syllables in total, which amounts to 4.63 syllables per second.

Table 10. Nonverbal features, frequency and average duration – Second measurement point (MD)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	9	187.78
Breathing	5	374
Silent pause	0	-
Wrong beginning	0	-
Hand movement	0	-
Raising eyebrows	3	460

The analysis (Table 10) showed that the journalist MD used fillers more often (nine times), and a breathing pause was used as many as five times. Hand movements are also subtler, almost non-existent. In other words, the journalist just brings her forearm closer to her body to emphasize certain words. She doesn't use a silent pause to finish a sentence at all. The journalist raises her eyebrows three times in this video clip case. In this video, the verbatim spoken text is as follows: *"Well, tomorrow is in front of Dubravka Šuica certainly one of the most important days in her career. It could be seemed that she was under pressure today when she was not ready to answer journalists' questions, which already suggests to candidates to refrain from any interviews before the hearing. She will be heard before the competent committees tomorrow. The main committee is the Constitution one - questions will be asked for departments, for ...* "The text contains 143 syllables, so the speech rate is 4.76 syllables per second.

Case 6. Journalist IR (RTL) - Both Measurement Points

Table 11. Nonverbal features, frequency and average duration – First measurement point (IR)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	2	225
Breathing	5	212
Silent pause	0	-
Wrong beginning	1	110
Hand movement	5	1422
Raising eyebrows	0	-

The analysis (Table 11) found that the journalist IR in the analysed video clip uses the filler only once, and he does not use complete pauses to separate the sentence at all. Breathing pauses occurred a total of five times over the 30 second video clip duration, and a pause due to a wrong start occurred only once. The nonverbal cues that the journalist used more were hand movements (three times), and he did not raise his eyebrows even once. The verbatim of the analysed speech is as follows *"According to what I heard from Mr. P. K. this morning as soon as we went out on the field, he said that in fact the people whose task is to assess the statics of buildings and the*

damage immediately on the spot will be the ones to send the information when the citizens can return. I met a large number of citizens who are actually interested in that. When they can return to their homes- that information has not yet arrived. We saw here in Đorđićeva street a few of these people who are actually assessing ... ". Although the journalist does not compose meaningful sentences, that is he does not complete them, he still does not make pauses due to the wrong sentence beginning. The number of syllables in the spoken text is 169, which means that the speech rate is 5.63 syllables per second.

Table 1. Nonverbal features, frequency and average duration – Second measurement point (IR)

Nonverbal features	Number of feature appearances	Average duration (ms)
Filler	0	-
Breathing	5	170
Silent pause	1	1020
Wrong beginning	0	-
Hand movement	8	2010
Raising eyebrows	4	187.5

The analysis (Table 12) showed that in this video clip the journalist IR uses a breathing pause three times and these are the only pauses he makes (paralinguistic means) in that recording. Nonverbal cues such as hand movements (as many as six times) and raising eyebrows (as many as five times) are predominant in the video clip. Hand movements are used to help maintain the speech tempo. The verbatim of the spoken text in the last example is as follows *"... an hour and a half longer than anticipated the measures were being tuned up - we did not find out what these specific measures would be, but we learned that they would be implemented in three phases: that there would be a first phase 27 April, after that May 4 and then May 11, and most importantly, the Prime Minister stressed that the goal of these measures is to preserve the economy, but not to jeopardize the result brought to us by these well-made restrictive epidemiological measures. Let's listen to what the Prime Minister said a few minutes ago."* This speech contains a total of 171 syllables - so the speech tempo is 5.7 syllables per second.

Table 13. Metric analysis of the paralinguistic elements – comparison regarding the reporting context

Broadcaster	Pause (crises clip)	Pause (non-crises clip)	Speaking rhythm (crises clip)	Speaking rhythm (non-crises clip)
1 (RI)	7	9	6.1	5.7
2 (PV) m	21	9	4.36	5.53
3 (DG) m	17	6	5.97	5.43
4 (AJ) m	9	13	4.83	5.67
5 (MD)	6	14	4.63	4.76
6 (IR) m	8	6	5.63	5.7

By taking a look at Table 13 and the measured metric values of speech rhythm based on the number of syllables per second that the journalists say, the speech fluency and speech speed when reporting, taking into consideration the context, were determined. Journalists in the cases researched speak at an average rate of 4.41 syllables per second, and none of them exceeds the normal speech tempo limit. From that we can conclude that the smallest number of syllables per second is spoken by PV in his earthquake reporting (4.36 syllables per second), and the largest number of syllables per second is spoken by Ms. RI in the reporting on the first COVID 19 case in the Republic of Croatia (6.1 syllables per seconds). The structure and frequency of the fluency breaking element in the observed cases is based on moderate, not long pauses. The filling pauses (fillers) are surprisingly short in all the previously observed cases.

Discussion

Based on all the obtained results, it was shown that the observed kinetic elements of nonverbal communication, as well as paralinguistic means appearing in speech, were moderately and as expectedly frequent. Our journalists in almost all cases use their hands to support the speaking rhythm, except in situations when they hold an object in their hands (papers or a microphone) which prevents them from moving their hands. Silent pauses are the least used from the category of paralinguistic means. They should normally be used to separate sentences, but as it is not natural in everyday speech for complete pauses to appear after each sentence (Skaric, 2008), this result is expected. Although in some cases it seems that journalists (especially in crisis reporting) are less prepared and more out of breath during speech, by researching the speech rate and the speech construction we concluded that their speech rate certainly belongs within normal rate limits. According to Pletikos (2006), the normal speech rate with pauses included (calculated by counting spoken syllables per second) for the Croatian language corpus varies between four to seven syllables per second. However, the average number of syllables per second of a speech in Croatian Dnevnik amounts to 6.7. It is interesting to note that the journalists in the researched cases spoke in an average rate of 4.41 syllables per second, and neither of them surpassed the normal speech rate limit.

The most commonly used elements of nonverbal communication in the observed cases are hand movement as well as the breathing pause and the filler pause. Speech fluency is within the normal speech rate, with breathing pauses included which are also natural and the use of fillers in speech that was not previously prepared because it is related to reporting in a sudden crisis situation. There is very often hand movement in the speech rhythm that subconsciously helps the journalist to pronounce the text more naturally. The pause in these cases most often played the role of a pause that allowed the journalist to take a breath, and was often accompanied by a filler to give the journalist room to think about the next word. Although, based on the results obtained from the analysed sample of Croatian television companies, it could be concluded that journalists cope professionally and properly in sudden crisis situations. Given the established fact they received insufficient formal education, the question arises whether this depends on previous professional or life experience. We should not disregard the experiences of reporting from the war period in our country, in which some of the journalists participated. On

the other hand, the journalists from the analysed sample could have, in some form, additionally invested in their professional and/or communication competences, which, among other things, reflected on mostly well-done reporting in sudden crises.

However, the fact that the communication competences in the journalists' sample from the analysed cases do not differ much depending on the reporting context - nonverbal features when reporting in sudden crisis situations do not differ too much compared to the reporting sample of everyday situations, except in a slightly larger number of breaks when reporting in crisis situations - indicates their communication skills should be improved. It can be concluded that even in situations that are not stressful for them, that is, the situations that enable them preparation in advance, they do not pay attention to nor do they have complete control over the elements and cues of their own nonverbal communication. Regarding some analytical parameters of the conversational journalists' analysis in the observed sample, the journalists' sample in this study is very small and does not allow us to draw usable conclusions. Although the data obtained indicate that in noncrisis reporting male journalists, on average, pronounce more syllables than their female counterparts (RI and MD). This could be related to research by Yuan, Liberman, Cieri (2006) according to which males tend to speak faster than females. The difference between them is, however, very small, only about 4 to 5 words or characters per minute (2%), though it is statistically significant.

Conclusion

Research on nonverbal communication suggests that nonverbal elements and cues are at least as important or influential as the verbal content of a message. This is because when verbal and nonverbal messages contradict, viewers tend to believe more in the nonverbal signal. It is important for communicators to focus on movements. Communicators should be aware of the fact that eye, eyebrow and lip movements respond to the inner mood and emotional aspects regarding that what is being said. In the context of public safety and quality information giving, the behaviour of journalists when reporting in sudden crisis situations is very important.

Based on the live reporting recordings, we noticed that the journalists reacted appropriately professionally when reporting, regardless of the stress level they were - perhaps - facing. This level of stress was somewhat evident in the fluency element (through more frequent pauses and rarely less meaningful sentences). However, we believe that journalists with their calm reporting did not negatively affect the feelings of fear and uncertainty in media audience due to the newly occurred crisis. However, the results of the software conversational analysis conducted on this journalists' sample seem to indicate to the need for improving their communication skills in terms of mastering their own nonverbal signalling. Absolutely unbiased journalism may not be possible to achieve. Nonetheless, in order to achieve neutrality standards in information giving and social responsibility it is necessary to include strengthening of the journalists' nonverbal communication competences through formal higher education as well as through the journalistic code of ethics.

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References

Althaus, S. L. (2002). American news consumption during times of national crisis. Political Science & Politics, 35(3), 517-521.

Aljukic, B. (2015). Language and gender differences in media discourse: a conversational analysis of television interviews. Dissertation. Faculty of Humanities and Social Sciences, Josip Juraj Strossmayer University of Osijek

Aljukic, B. (2018). ELAN Linguistic Annotator i svojstva stvarne konverzacijske interakcije. Proceedings from the Sixth International Conference at the Faculty of Foreign Languages: Language, Literature and Technology, 21-36 https://www.academia.edu/37546148/.

Andersen, P. (1998). Nonverbal Communication: Forms and Functions. McGraw-Hill Humanities/Social Sciences/Languages.

Bagaric, Z. (2021). Inclusive Journalist Education in Croatia: Transformative Potential of Media. Proceedings of the 3rd International Conference on Future of Social Sciences. Diamond Scientific Publishing. 44-55. https://www.dpublication.com/wp-content/uploads/2021/02/22-1072.pdf.

Barovic, V. (2011). Objektivnost, novinarska etika i izvještavanje u kriznim situacijama., Medijske studije, 2(3-4), 118-127. https://hrcak.srce.hr/87882.

Billig, M. (1999). Freudian Repression: Conversation Creating the Unconscious. Cambridge University Press.

Bogcev, M. (2018). Govor tijela, uloge i značenja neverbalne komunikacije u poslovnom komuniciranju. [Body language, role and significance of nonverbal communication in business communication]. Final paper. Medimursko veleuciliste u Cakovcu. https://urn.nsk.hr/urn:nbn:hr:110:564365.

Cao, Q. Hu, W.; Zhou, S.; Luo, B.; YU, Y..; Liao, S. S.; Zhao, J. L. & Lau, R. Y-K. (2020). The Role of Media Coverage on Pandemic Containment: Empirical Analysis of the COVID-19 Case. PACIS 2020 Proceedings. 162. https://aisel.aisnet.org/pacis2020/162.

Cohen, B. (1963) The Press and Foreign Policy, Princeton University Press.

Cole, T. W. & Fellows, K. L. (2008). Risk Communication Failure: A Case Study of New Orleans and Hurricane Katrina. Special Issue: Communication Issues Related to Hurricane Crises. 211-228, https://doi.org/10.1080/10417940802219702.

Coleman, R. & Wu, H. D. (2006). More Than Words Alone: Incorporating Broadcasters' Nonverbal Communication into the Stages of Crisis Coverage Theory - Evidence From September 11th. Journal of Broadcasting & Electronic Media, 50(1), 1-17, DOI: 10.1207/s15506878jobem5001_1.

Deavours, D. (2020). Written All Over Their Faces: Neutrality and Nonverbal Expression in Sandy Hook

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Coverage. Electronic News. https://doi.org/10.1177/1931243120954855.

Etuaho, O. (2012). Behind the smile: a study of British and American news presenters' non-verbal communication. University of Jyväskylä, https://jyx.jyu.fi/bitstream/handle/123456789/37716/1/.

Farnvald, S. (2011). Neverbalna komunikacija voditelja informativnog programa. [Nonverbal communication of speakers in informative program]. Master's Thesis. Filozofski fakultet u Zagrebu. http://darhiv.ffzg.unizg.hr/1505/1/.

Gao, S. (2019). Media Competitiveness of Live TV News. Advances in Social Science, Education and Humanities Research, 378. 927-931. https://www.researchgate.net/339275329.

Holy, M. & Borcic, N. (2018). Analysis of The Croatian Crisis Communication Academic Discourse. Living in Crisis Mode: Time to reconsider definition, meaning and practice? Communication Management Forum 2017. Proceedings: Living in crisis mode: Time to reconsider definition, meaning and practice? 363-380. https://bib.irb.hr/datoteka/949933.

Hromadzic, H. (2014). Medijska konstrukcija društvene zbilje: socijalno-ideološke implikacije produkcije medijskog spektakla. [Media Construction of Social Reality. Social and Ideological Implications of Production of Media Spectacle]. AGM.

James, R. K., & Gilliland, B. E. (2001). Crisis intervention strategies. Brooks/Cole Thomson Publishing Co.

Jansen, S. C. (2012). Walter Lippmann: A Critical Introduction to Media and Communication Theory. Peter Lang Inc., International Academic Publications.

Karlsson, M. B. (2010). Participatory Journalism and Crisis Communications: A Swedish Case Study of Swine Flu Coverage. Observatorio Journal, 4(1), 201-220. https://www.academia.edu/3551683/.

Mehrabian, A. (1972). Nonverbal communication. Aldine-Atherton.

Miller, A.& Leshner, G. (2007). How Viewers Process Live, Breaking, and Emotional Television News. Media Psychology, 23-40. DOI: 10.1080/15213260701300915.

Perinic, J. (2011). Javno mnijenje kao subjektivna značajka krizne situacije: Utjecaj medija i službi za odnose s javnošću na javno mnijenje. [Public opinion as a subjective trait of a crisis situation – the influence of the media and public relations services on public opinion]. Dissertation. Filozofski fakultet u Zagrebu, https://www.bib.irb.hr/800959.

Pisonic Babic, J. (2017). Mediji i izvještavanje u kriznim okolnostima: terorizam i rat. Final Paper. [Media and Reporting during a Crisis: Terrorism and War]. Sveučilište u Zagrebu, Hrvatski studiji. https://urn:nbn:hr:111:993694.

Plance, D. (2012). Breaking News: The Role Of The Media In Disasters. West Virginia University Press. https://www.researchgate.net/publication/293683615.

Plenkovic, M. (2015). Krizno komuniciranje. [Crisis Communication] Media, culture and public relations, 6(2), 113-118. https://hrcak.srce.hr/149016.

Pletikos, E. (2008). Akustički opis hrvatske prozodije riječi. [Acoustic description of Croatian word prosody]. Dissertation. Sveučilište u Zagrebu, Filozofski fakultet. https://bib.irb.hr/datoteka/337326. .

Scanlon, J. & Hunsberger, A. (2011). Dealing with the Dead in Disasters: A Professional and International Process. The Brown Journal of World Affairs 17(2), 99-111.

Skaric, I. (1988). Temeljci suvremenog govorništva. [The foundations of modern oratory]. Školska knjiga.

Skaric, I. (2008) Hrvatski izgovorni identitet. [Croatian Pronunciation Identity]. Govor/Speech: časopis za fonetiku, 24(2) 79-90.

Sorribes, C. P. & Cortiñas Rovira, S.(2011). Journalistic Practice in Risk and Crisis Situations: Significant Examples from Spain. Journalism, 12(8) 1052-1066. DOI: 10.1177/1464884910388233.

Tierney, K., Bevc, C., & Kuligowski, E. (2006). Metaphors Matter: Disaster Myths, Media Frames, and Their Consequences in Hurricane Katrina. Annals of the American Academy of Political and Social Science, 604, 57–81. https://doi.org/10.1177/0002716205285589.

Tomic, Z. & Milas, Z. (2007). Strategija kao odgovor na krizu. [Strategy as crisis response]. Politička misao, 44(1), 137-149 https://hrcak.srce.hr/20151.

Van der Meer, T. G. L. A., Verhoeven, P., Beentjes, J. W. J. & Vliegenthart. (2017). Disrupting gatekeeping practices: Journalists' source selection in times of crisis. Journalism 18(9), 1107-1124.

Van der Meer, T.G. L. A. & Verhoeven, P. (2013). Public Framing Organizational Crisis Situations: Social Media Versus News Media. Public Relations Review 39(3), 229–231 DOI: 10.1016/j.pubrev.2012.12.001 .

Vasterman, P., Yzermans, J. & Dirkzwager, A. J. (2005). The Role of the Media and Media Hypes in the Aftermath of Disasters. Epidemiologic Reviews,27(1), 107-114. DOI: 10.1093/epirev/mxi002.

Vukic, A. (2015). Odnos paralingvistčkih sredstava i neverbalnih znakova u komunikaciji. [Relation of paralinguistic elements and nonverbal signals in communication]. Master's thesis. Sveučilište J. J. Strossmayera u Osijeku, https://urn.nsk.hr/urn:nbn:hr:142:632919.

Vuletic, B. (2007). Lingvistika govora. Zagreb: FF press. https://hrcak.srce.hr/173453.

Wei, J., Zhao, D., Yang, F., Du, S. & Marinova, D. (2010). Timing crisis information release via television. Disasters, 34(4), 1013-1030. DOI: 10.1111/j.1467-7717.2010. 01180.x

Wilson, L. (2004). Media Dependency During a Large-Scale Social Disruption: The Case of September 11. Mass Communication and Society, 7(3), 339-357.

Yuan, J., Liberman, M., Cieri, C. (2006). Towards an Integrated Understanding of Speaking Rate in Conversation. INTERSPEECH 2006 - ICSLP, Ninth International Conference on Spoken Language Processing, Pittsburgh, PA, USA, September 17-21. https://www.researchgate.net/publication/221478381.